

ABSTRACT

Vibration gyro circuitry, a vibration gyro unit, and a method for detecting a vibration gyro output, which enable  
5 detection of a rotational angular velocity with high sensitivity, are provided. The circuitry and the unit includes a differential amplifier circuit (4) for outputting a signal  $V_{da}$  corresponding to a difference ( $V_{gl} - V_{gr}$ ) between output signals of two detection pieces of a  
10 vibration gyro (31), a synchronous detection circuit (5) for synchronously detecting the output signal  $V_{da}$  of the differential amplifier circuit (4), and a phase shift circuit for supplying to the synchronous detection circuit (5) a signal, as a timing signal  $V_{ck}$  for the synchronous  
15 detection, which is phase-shifted with respect to a drive signal (an output signal of an adding circuit 1)  $V_{sa}$  supplied to the vibration gyro (31). The phase difference  $\theta_{ps}$  between the drive signal  $V_{sa}$  and the timing signal  $V_{ck}$  is set on the basis of a phase difference characteristic of  
20 a detection sensitivity  $S$  for the output signal  $V_{da}$  of the differential amplifier circuit (4), which is obtained in advance under a condition where a rotational angular velocity is applied to the vibration gyro (31) in a driving state.